1870MNRAS..30..220B

bered that Herschel could not see the satellites when his telescope was used (like Mr. Lassell's) as a Newtonian.*

As Professor Pritchard, at a recent meeting of this Society, spoke of himself as one of scarce three (he thought) present who had read all Sir William Herschel's papers, he will not need to be reminded that Herschel (to use Professor Grant's words) "asserted his firm belief in the existence" of these other satellites. I confess that I should require *very* strong negative evidence to force on me the conviction that Herschel was mistaken on any occasion when he expressed confidence about an observation. Writing with the remembrance of Sir William Herschel's confidence strong upon me, I said in *Other Worlds* that "one cannot read the account of Herschel's method of procedure without feeling that no amount of mere negative evidence can be opposed effectively to the positive information he has left respecting those four orbs." Is this, I would ask, to be considered as an inexcusable attack (as Professor Pritchard has implied) on our esteemed President, who has, indeed, taught us to believe in unseen satellites, *since his name will for all time be associated with the discovery of an eighth Saturnian satellite long after astronomers had concluded that but seven exist?*

Further Note on the Change of the Colour in Jupiter.
By John Browning.

Since I sent in my Note in reply to the Astronomer Royal's remarks, which appeared in his Report to the Board of Visitors, I have been favoured with a copy of a paper by Prof. A. M. Mayer, of Lehigh University, Pennsylvania, U. S. As this paper appears to me to fully corroborate the substance of the three papers I have had the honour of giving to the Society, I now venture to present some extracts from it:—

"Every astronomer who, during this fall and winter, has made careful observations of *Jupiter*, must have remarked the unusual colours of his disk and belts, and the remarkable forms and mutations which the latter have frequently presented."

* * * * *

"The colour of the planet next demands our attention, and surely no one familiar with the usual tints of the belts and of the general surface can fail to remark the unusual colours which this drawing exhibits.

"*Jupiter's* disk generally is of a light yellow colour crossed by

---

* Professor Grant thinks it likely that Sir William Herschel refers to his 20 feet mirror, not to the 40-feet one (which was difficult to use) in his account of the discovery of these satellites. But although Sir W. Herschel does not mention specially the 40-feet telescope, it is evident from his remark about the use of the "front-view" (coupled with his original description of that method of using large reflectors) that it was his great mirror he employed. Otherwise, indeed, the whole matter would be infinitely perplexing.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1870MNRAS..30..221P

belts of a brownish-grey tint; sometimes, though rarely, approaching a rose colour. Often the brown is entirely wanting, and the belts are merely dull streaks on a light yellow ground.

"We can best convey an accurate conception of the colouring, seen on the 5th of January, by stating the manner in which we tinted the drawing, which, when compared repeatedly at the telescope by myself and others, was found correctly to give the colours and their relative intensities.

"The whole disk was first washed over with a slight tint of yellow. The colour of the region between the equatorial belts was correctly reproduced by pure yellow mixed with crimson-lake, while the two dark belts north, and the one south of the equator were obtained by the same combination of colours, with more crimson-lake added, so as to bring the tint to approach a coppery hue. The polar shadings were correctly given by pure yellow with a slight dash of crimson-lake, which tinting was subsequently overlaid with a very thin wash of light lead colour."

Reading over the last paragraph, one might imagine it to be a description of the last coloured drawing which I have made of *Jupiter*. A copy of this drawing forms the frontispiece to Mr. Proctor's new work, *Other Worlds than Ours*. On referring to this coloured plate, the resemblance may be almost as clearly traced as by examination of the drawing. Professor Mayer used a *refractor* of six inches aperture, made by Alvan Clark.

Clapham, June 30th, 1870.

Further Remarks on the Corona. By Richard A. Proctor, B.A.

At the last meeting of this Society, Dr. Gould, of America, indicated his belief that the trapezoidal corona seen by himself and other observers during the progress of the American eclipse was in fact but the chromosphere seen under unusually favourable circumstances. He added, that the light outside that four-cornered corona appeared to shift in position, and hence he concluded that it was terrestrial.

It seems to me that if this view be admitted, the difficulty pointed out by Mr. Lockyer in the case of the corona considered generally, exists in scarcely diminished extent in the case of this trapezoidal appendage also. Estimated by most of the observers as extending fully 12′ from the disc of the eclipsed Sun, its real depth would be far more than 320,000* miles, and the pressure even at the summits of the highest prominences would be enormous.

We gain nothing, then, by Dr. Gould's supposition; though of course that does not prove it to be erroneous. But Dr.

---

* Even in Mr. Whipple's photograph it has an extent of fully 6′, which would correspond to more than 160,000 miles, or 80,000 miles above the highest prominences yet seen.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System